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## REMARKS

Claims 1-4, 6, 8, 12, and 21-39 are pending in the present application. By this *Response to Final Office Action*, Claims 37 and 39 are canceled, and Claims 1, 3, 6, 12, 21, 23, 24, 29-32, 36, and 38 are amended. The amendments to the claims are supported by the application as originally filed, and do not introduce new matter. It is respectfully submitted that the present application is in condition for allowance.

**REJECTION OF CLAIMS 1-4, 6, 8, 12, AND 21-39 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH**

Claims 1-4, 6, 8, 12, and 21-39 were rejected under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. Applicants respectfully traverse this rejection in view of the present amendments, although the "new matters" as alleged by the Examiner are removed and Claims 37 and 39 are canceled for issues of clarity. Therefore, it is respectfully submitted that the rejection is moot and Claims 1-4, 6, 8, 12, 21-36, and 38 of the present application are patentable.

**REJECTION OF CLAIMS 1, 3, 4, 6, 8, 9, 12, 34, AND 36-39 UNDER 35 U.S.C. § 102(b)**

Claims 1, 3, 4, 6, 8, 9, 12, 34, and 36-39 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,792,090 ("the '090 patent"). Applicants respectfully traverse this rejection in view of the present amendments, although Claims 37 and 39 are canceled for issues of clarity.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987).

Amended Claims 1, 3, 4, 6, 8, 9, 12, 34, 36, and 38 now recite that the oxygen delivery matrix absorbs liquid from a tissue environment. It is respectfully submitted that this recited limitation/element is not found in the '090 patent. Therefore, Claims

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1, 3, 4, 6, 8, 9, 12, 34, 36, and 38 of the present application are patentable over the '090 patent.

REJECTION OF CLAIMS 1-4, 6, 8, 12, AND 21-39 UNDER 35 U.S.C. § 103(a)

Claims 1-4, 6, 8, 12, and 21-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the '090 patent and U.S. Patent No. 6,187,290 ("the '290 patent"). Applicants respectfully traverse this rejection in view of the present amendments, although Claims 37 and 39 are canceled for issues of clarity.

The Examiner alleged that "it would be obvious to one having ordinary skill in the art at the time of the invention to provide foam comprising oxygen generated from the reaction of hydrogen peroxide and a catalyst as described by U.S. '090 and add active agents to the foam as disclosed by U.S. '290, motivated by the teaching of U.S. '290 that that foam forms protective cover to the wound and meanwhile delivers active agents, with reasonable expectation of having foam wound dressing comprising oxygen and active agents that are beneficial to the wound that provides optimal wound healing with minimal risk of infection."

"To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art." MPEP § 2143.03. See, also, *In re Royka*, 490 F.2d 981 (CCPA 1974). Applicants respectfully submit that, even assuming the teachings of the '090 patent and the '290 patent could be combined, the combined references do not teach or suggest all limitations of the claims. Accordingly, it is respectfully submitted that amended Claims 1-4, 6, 8, 12, 21-36, and 38 are patentable over the '090 patent and the '290 patent.

As discussed, *supra*, Claims 1-4, 6, 8, 12, 21-36, and 38 of the present application currently recite that the oxygen delivery matrix absorbs liquid from a tissue environment. Neither reference cited teaches or suggests this limitation. In fact the two references clearly teach away from Applicants' currently claimed invention. The '090 patent teaches that "The wound itself is normally covered by an occlusive moist dressing....This layer serves to isolate the wound from infection and

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in addition maintain the wound in a moist condition, generally recognized as encouraging the healing process, but allows permeation of oxygen,....." See the '090, column 4, lines 18-23. The '290 patent teaches "The advantages of applying a topical product in the form of a foam include.... [m]aintains a moist environment." See the '290 patent, column 3, lines 25-26, 36. The wound devices of the '090 patent and the '290 patent are used to keep the wound environment wet and moist. In contrast, Applicants' currently claimed invention recites that the polymeric matrix is made from a swellable polymer that is capable of absorbing fluid from a tissue environment. An aspect of Applicants' invention is that the invention is capable of providing oxygen to a site while "absorbing excess fluid" (See US2001/0041188 A1, Applicants' published application, paragraph 0064), "providing a superior moisture regulation capacity" (paragraph 0064); and "enable not only the absorption and management of wound exudates and moisture, but importantly also enable the control of oxygen tension..." (paragraph 0070). The '090 patent and the '290 patent, either alone or in combination, do not teach or suggest a device that provides oxygen to a site and also absorbs liquid from a tissue environment.

In addition, to establish a *prima facie* case of obviousness, it is not enough even if a prior art reference, or a combination of references, teaches or suggests all limitations of the claims. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations." MPEP §2143.

There is no teaching, suggestion, or motivation, either in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art,

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to modify the cited references individually or to combine these references' teachings to create the presently claimed invention.

Applicants' reading of the cited references is further strengthened by the law which dictates that: "[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification." MPEP § 2143.01. See also, *In re Gordon*, 733 F.2d 900 (Fed. Cir. 1984).

The '090 patent teaches a wound dressing containing an oxygen permeable membrane which is incapable of or inefficient in transmitting ionic substances in solution. The wound dressing of the '090 patent contains an oxygen permeable membrane between the wound tissue and the oxygen source (column 4, lines 55-58). The oxygen permeable membrane is "incapable or inefficient in transmitting ionic substances in solution such as peroxide ion, hydroxide ion, and heavy metal ions" (column 4, line 66 – column 5, line 1). In addition, "the oxygen permeable membrane may also be abutted ... with a layer of ion exchange resin particles or powders, or other ion adsorbing media" (column 5, lines 1-4). The '090 patent further teaches that suitable oxygen permeable membranes "are those having ... a structure which includes numerous polar or ionic groups capable of attracting ionic species" (column 5, lines 31-34). The intended purpose of including the oxygen permeable membrane and the structure containing polar or ionic groups with the wound dressing of the '090 patent is to prevent ions, such as peroxide or hydroxide ions, from reaching the wound site. It is well known in the art that peroxide ions can cause damage to tissues.

However, most of the active agents taught in the '290 patent are ionic substances in solution, such as, acetic acid, povidone iodine, mercurochrome phenoxyethanol, silver nitrate, undecanoic acid, silver sulphadiazine, benzalconium chloride, hydrogen peroxide, potassium permanganate, framycetin sulphate, and fusidic acid (column 4, lines 41-61).

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The combination of the active agents taught in the '290 patent, as alleged by the Examiner, would render the wound dressing of the '090 patent being modified unsatisfactory for one of its intended purposes, i.e., to prevent peroxide ions from reaching the wound site. The ions released by the active agents can eliminate (e.g., by saturating the polar or ionic groups available) or at least reduce the ion-binding capacity of the wound dressing. These ions may even release peroxide ions which have bound to the wound dressing and enable peroxide ions to reach the wound site. A wound dressing with a loss or reduction of the ion-binding capacity loses its capacity for sequestering peroxide ions and thus for preventing peroxide ions from reaching the wound site. Such an inferior product fails to satisfy the intended purposes of the '090 patent.

Similarly, the modification of the '290 patent with the teaching of the '090 patent would also render the foam of the '290 patent being unsatisfactory for its intended purpose, i.e., to deliver active agents to a wound site. The ion exchange resin particles or powders, or other ion adsorbing media, as taught by the '090 patent, would prevent the active agents of the '290 patent from reaching the wound site, which is the intended purpose of the '290 patent.

In brief, the proposed modification, as alleged by the Examiner, "would render the prior art invention being modified unsatisfactory for its intended purpose." Therefore, "there is no suggestion or motivation to make the proposed modification."

Furthermore, as stated, *supra*, to "establish a *prima facie* case of obviousness ... there must be a reasonable expectation of success." MPEP §2143. There is no reasonable expectation of success to combine the teachings of the '090 patent and the '290 patent. In fact, one with ordinary skill in the art would readily understand that modifying the invention of the '090 patent with the teaching of the '290 patent, and *vice versa*, will not result in a desirable product. As discussed, *supra*, the incorporation of the active agents of the '290 patent can cause the wound dressing of the '090 patent to leak peroxide ions to a wound site and thus cause various tissue

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damage, while the modification of the invention of the '290 patent using the teaching of the '090 patent can reduce or completely block the release of active agents to a wound site and thus render the product ineffective.

Therefore, Applicants respectfully submit that the Examiner has failed to establish a *prima facie* case of obviousness, as the teachings of the '090 patent and the '290 patent, alone or in combination, fail to render obvious Applicants' currently claimed invention. Claims 1-4, 6, 8, 12, 21-36, and 38 of the present application are respectfully submitted as patentable over the '090 patent and the '290 patent.

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### CONCLUSION

The foregoing is a complete response to the *Final Office Action* mailed March 7, 2005. Applicants believe that they have fully responded to the *Final Office Action*, and that each of the claims is in condition for immediate allowance. Applicants respectfully request reconsideration and allowance of all pending claims.

Applicants have requested a personal interview with the Examiner to resolve any questions that may remain after consideration of this Response.

If the Examiner believes there are other issues that can be resolved by a telephone interview, or there are any informalities that remain in the application which may be corrected by the Examiner's amendment, a telephone call to the undersigned attorney at (404) 885-3652 is respectfully solicited.

Respectfully submitted,



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